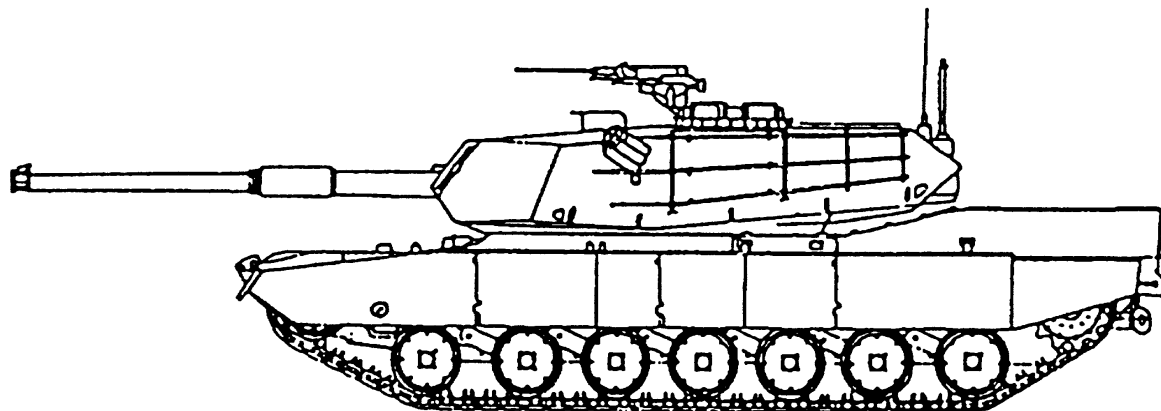


M1 ABRAMS



SYSTEM IDENTIFIERS

NOMENCLATURE:	Tank, Main Battle, 105mm
SSN:	G82914
LIN:	T13374
NSN:	2350-01-061-2445
AMIM NO:	I017
EIC:	AAA
FUEL TYPE:	DIESEL

SYSTEM DESCRIPTION

The M1 ABRAMS is a fully tracked, heavily armored, ground combat system used for close combat. The armament includes an M68E1 105mm main gun, an M2 .50 caliber machine gun, an M240 7.62mm coaxial machine gun, a skate-mounted 7.62mm machine gun, and an M250 six-barrelled smoke discharger. The tank carries 55 main gun rounds; 1,000 .50 caliber rounds; and 14,400 7.62mm rounds. Fire direction is provided by a computer system integrating a Laser Range Finder with Thermal Imaging Night Vision devices. The crew consists of a commander, gunner, loader, and driver. The crew is protected by a fire detection and an automatic fire suppression system and compartmentalized fuel and ammunition storage. The M1 is powered by a 1,500 horsepower turbine engine with a top governed speed of 41 miles per hour. The combat weight is 60 tons. The fuel capacity is 504 gallons with a range of 310 miles. The M1 can be upgraded to an M1A1.

The list below identifies selected components associated with the weapon/materiel system.

M1 ABRAMS

<u>LIN</u>	<u>NSN</u>	<u>NOMENCLATURE</u>
A10837	4910-01-142-2640	ADAPTER, HARDWARE, M1
A32060	6665-00-935-6955	ALARM CHEMICAL AGENT AU
A33120	6665-00-859-2215	ALARM UNIT CHEMICAL AGENT AUTOMATIC
A46470	5820-00-892-3342	AMPLIFIER, AUDIO FREQ
B90426	4933-01-141-0812	BORESIGHTING EQUIPMENT WEAPON, MUZZ
C40499	1265-01-211-0250	COMPUTER GROUP GUN DIRECTION, OL-2
C57780	6625-01-119-7092	COMBINED THERMAL SYSTEM
C89070	1080-00-108-1173	CAMOUFLAGE SCREEN SUPPORT
C89145	1080-00-103-1246	CAMOUFLAGE SCREEN SYSTEM
E54166	1240-00-332-1780	COLLIMATOR INFINITY AIMING REFERENC
K93373	5830-00-856-3273	INTERCOMMUNICATION SET
L44680	1055-00-000-0138	LAUNCHER, GRENADE SMOKE
L91701	1005-00-957-3893	MACHINE GUN CALIBER .50, HEAVY FIXE
L92352	1005-01-025-8095	MACHINE GUN, 7.62MM
M10936	4240-00-994-8750	MASK, PROTECTIVE TANK
M35691	5855-00-790-6197	METASCOPE, AN/PAS-6
N04456	5855-00-150-1820	NIGHT VISION GOGGLES
Q03468	1290-00-169-1937	QUADRANT FIRE CONTROL
Q45779	5820-00-223-7412	RADIO SET, AN/VRC-12
Q56783	5820-00-223-7475	RADIO SET, AN/VRC-53
R25600	5820-00-892-0624	RECEIVER RADIO, R-442/VRC
R44659	5820-01-151-9916	RADIO SET AN/VRC-87
R44795	5820-01-151-9918	RADIO SET AN/VRC-89
S62860	4910-01-231-0343	GROUND HOP SUPPORT
T13871	4931-00-629-3541	TEST SET, FIELD
T52849	6625-01-120-0764	TEST SET ELECTRONIC SYSTEM
T70158	6625-00-629-3539	TEST SET, CABLE

SYSTEM VARIANTS

<u>MDS</u>	<u>LIN</u>	<u>NSN</u>
M1IP	T13374	2350-01-136-8738

This summary provides an overview of FY 94 Total Army operating and support costs and other information for the weapon system. Average cost per system or per mile are displayed so the data can be used in performing analytical and cost studies. Average costs are calculated using the end item's density and activity. NET REPARABLES represent the cost with the Major Subordinate Command (MSC) specific credit rates applied (detailed in Section 1 - Overview).

<p align="center">M1 ABRAMS FY 94 TOTAL ARMY COST SUMMARY (FY 94 Constant Dollars)</p>

ACTIVITY/DENSITY		DEPOT END ITEM MAINTENANCE (5.061)	
MILES	587,716	TOTAL	\$49,422,820
NUMBER OF SYSTEMS	2,185	QUANTITY COMPLETED	625
OPTEMPO (MILES/SYSTEM)	269	AVG COST/END ITEM	\$79,076.51

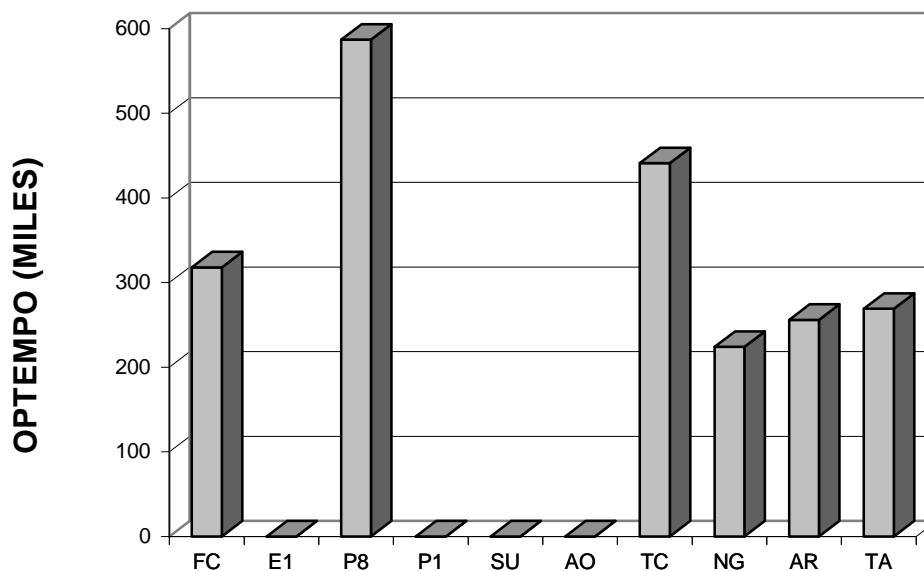
CLASS III-POL (5.05)		DEPOT SECONDARY ITEM MAINTENANCE	
POL	\$3,177,849	TOTAL	\$3,665,562
AVG COST/SYSTEM	\$1,454.39	QUANTITY COMPLETED	1,792
AVG COST/MILE	\$5.41	AVG COST/SECONDARY ITEM	\$2,045.51

CLASS V-AMMUNITION (2.11)		INTERMEDIATE MAINTENANCE		
AMMUNITION	\$3,033,607		<u>DS/GS</u>	<u>CIVILIAN</u>
AVG COST/SYSTEM	\$1,388.38	MIL/CIV LABOR COST	\$672,074	\$0
AVG COST/MILE	\$5.16	AVG COST/SYSTEM	\$307.59	\$0.00
		AVG COST/MILE	\$1.14	\$0.00
		MAINTENANCE MANHOURS	40,462	0
		MMHs/SYSTEM	18.52	0.00
		MMHs/MILE	0.07	0.00

CLASS IX MATERIEL-PARTS (5.04/5.03)			
	FY 94	AVG COST	AVG COST
	DOLLARS	PER SYSTEM	PER MILE
CONSUMABLES	\$11,288,230	\$5,166.24	\$19.21
NET REPARABLES	\$29,455,357	\$13,480.71	\$50.12
TOTAL	\$40,743,587	\$18,646.95	\$69.33

The following graph and table display FY 94 OPTEMPO data by MACOM. ACTIVITY represents the miles recorded in The Army Maintenance Management System-Equipment Data Base (TAMMS-EDB). NUMBER OF SYSTEMS is the density recorded in the Continuing Balance System-Expanded (CBS-X). OPTEMPO is calculated by dividing ACTIVITY (Miles) by NUMBER OF SYSTEMS. The Total Army (TA) OPTEMPO is the summation of all MACOM activities (Miles) divided by the summation of all MACOM number of systems.

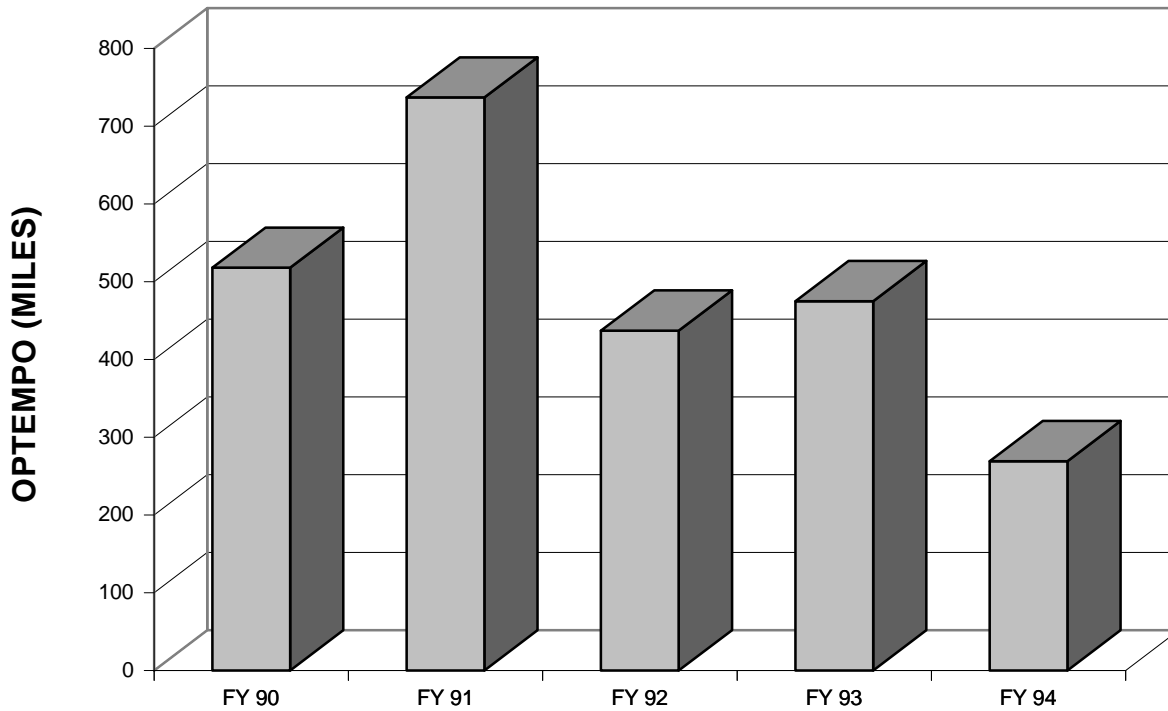
M1 ABRAMS



M1 ABRAMS FY 94 MACOM OPTEMPO				
MACOM		ACTIVITY (Miles)	NUMBER OF SYSTEMS	OPTEMPO
CODE	NAME			
FC	FORSCOM	15,900	50	318
E1	USAREUR	0	0	0
P8	EUSA	78,612	134	587
P1	USARPAC	0	0	0
SU	USARSO	0	0	0
AO	USASOC	0	0	0
TC	TRADOC	77,121	175	441
NG	ARNG	357,661	1,598	224
AR	USAR	58,422	228	256
TA	TOTAL ARMY	587,716	2,185	269

The following graph and table display FY 90-94 OPTEMPO by Total Army. The Total Army ACTIVITY and NUMBER OF SYSTEMS are a summation of all the MACOMs displayed on the previous page. ACTIVITY represents the miles recorded in TAMMS-EDB. NUMBER OF SYSTEMS is the density recorded in the Continuing Balance System - Expanded (CBS-X). OPTEMPO is calculated by dividing ACTIVITY (Miles) by NUMBER OF SYSTEMS. Blank rows indicate system was not tracked in the OSMIS database during that fiscal year.

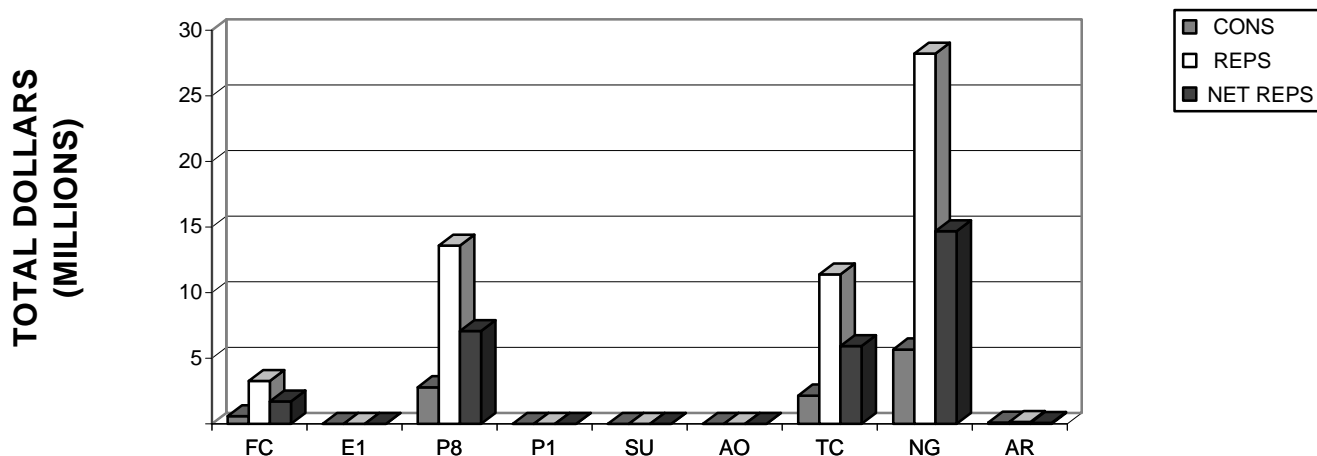
M1 ABRAMS



M1 ABRAMS FIVE YEAR TOTAL ARMY OPTEMPO			
FISCAL YEAR	ACTIVITY (Miles)	NUMBER OF SYSTEMS	OPTEMPO
FY 90	1,201,648	2,319	518
FY 91	1,922,263	2,607	737
FY 92	837,683	1,917	437
FY 93	676,830	1,425	475
FY 94	587,716	2,185	269

The following graph and table display FY 94 Class IX costs for consumables (CONS), reparable, (REPS), and net reparable (NET REPS) by MACOM. CONS and REPS are the total costs of requisitions recorded in the Logistic Intelligence File (LIF). NET REPS are the cost to the customer in the field and are calculated by applying an MSC-specific credit rate at the NSN level. TOTAL ARMY (TA) costs are the summation of costs across all MACOMs in the table. NET TOTAL COSTS are the sums of the costs of CONS and NET REPS. AVG PER SYSTEM costs are calculated by dividing the costs in NET TOTAL COSTS by the number of systems for each MACOM. AVG PER MILE costs are calculated by dividing NET TOTAL COSTS by the activity (Miles) for each MACOM.

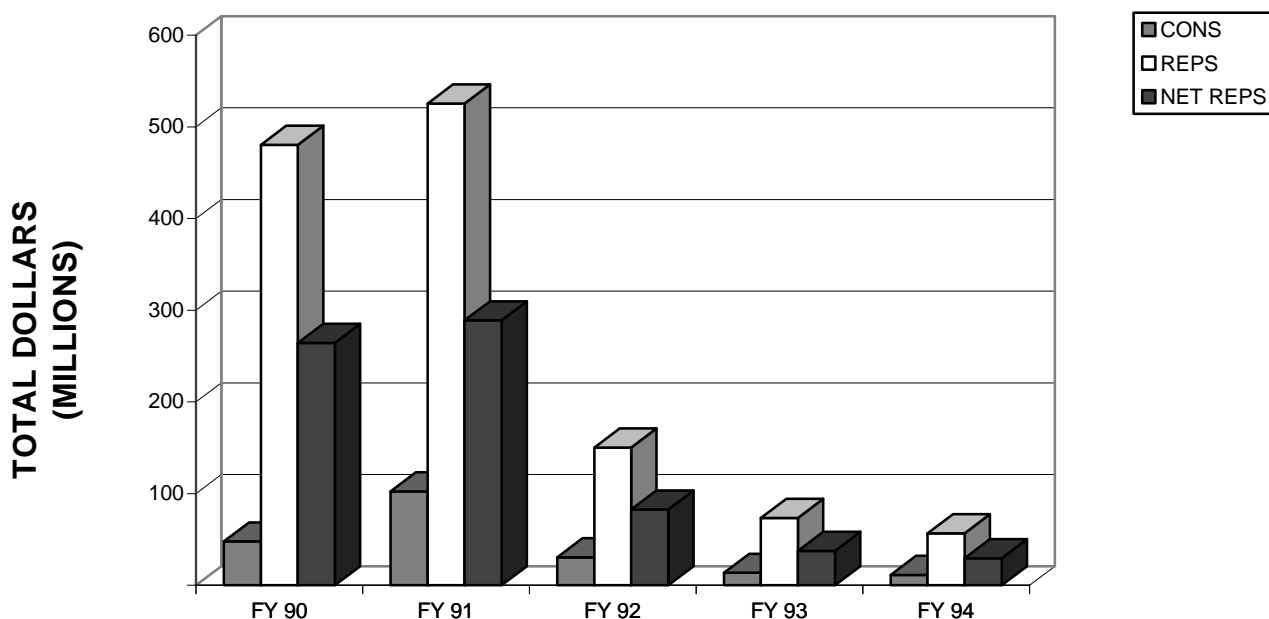
M1 ABRAMS



M1 ABRAMS FY 94 MACOM CLASS IX COSTS							
MACOM		CONS	REPS	NET REPS	NET TOTAL COSTS	AVG PER SYSTEM	AVG PER MILE
CODE	NAME						
FC	FORSCOM	575,646	3,263,703	1,697,068	2,272,714	45,454	143
E1	USAREUR	0	0	0	0	0	0
P8	EUSA	2,791,238	13,577,257	7,065,925	9,857,163	73,561	125
P1	USARPAC	0	0	0	0	0	0
SU	USARSO	0	0	0	0	0	0
AO	USASOC	0	0	0	0	0	0
TC	TRADOC	2,157,465	11,400,405	5,929,497	8,086,962	46,211	105
NG	ARNG	5,669,051	28,221,153	14,690,666	20,359,717	12,741	57
AR	USAR	94,830	138,152	72,201	167,031	733	3
TA	TOTAL ARMY	11,288,230	56,600,670	29,455,357	40,743,587	18,647	69

The following graph and table display FY 90-94 Class IX costs for consumables (CONS), reparable (REPS) and net reparable (NET REPS) by Total Army. The Total Army costs are a summation of all the MACOMs displayed on the previous page. CONS and REPS are the total cost of requisitions recorded in the Logistic Intelligence File (LIF). NET REPS are the cost to the customer in the field and are calculated by applying an MSC-specific credit rate at the NSN level. NET TOTAL COSTS are the sums of the costs of CONS and NET REPS. AVG PER SYSTEM costs are calculated by dividing the costs in NET TOTAL COSTS by the number of systems in the Total Army for the fiscal year. The AVG PER MILE costs are calculated by dividing NET TOTAL COSTS by the Total Army Activity for the fiscal year. Blank rows indicate system was not tracked in the OSMIS database

M1 ABRAMS



M1 ABRAMS FIVE YEAR TOTAL ARMY CLASS IX COSTS						
FISCAL YEAR	CONS	REPS	NET REPS	NET TOTAL COSTS	AVG PER SYSTEM	AVG PER MILE
FY 90	47,848,975	480,597,198	264,328,459	312,177,434	134,617	260
FY 91	102,296,418	525,444,553	288,994,505	391,290,923	150,092	204
FY 92	30,554,247	150,423,983	82,733,190	113,287,437	59,096	135
FY 93	13,647,454	73,615,419	37,543,864	51,191,318	35,924	76
FY 94	11,288,230	56,600,670	29,455,357	40,743,587	18,647	69

The Total Army Class IX costs from the previous pages are broken out by Work Breakdown Structure (WBS) in the following table. The FY 94 WBS Class IX costs for consumables (CONS) and reparable (REPS) are the total cost of requisitions recorded in the Logistic Intelligence File (LIF). The NET REPS are the cost to the customer in the field and are calculated by applying an MSC-specific credit rate at the NSN level. The TOTAL costs are a summation of all the WBS elements displayed in the table. NET TOTAL COSTS are the sum of the costs in CONS and NET REPS. AVG PER SYSTEM costs are calculated by dividing the costs in NET TOTAL COSTS column by the total number of systems in the Army. AVG PER MILE costs are calculated by dividing the NET TOTAL COSTS by the total activity (Miles) for the entire Army.

M1 ABRAMS FY 94 TOTAL ARMY WORK BREAKDOWN STRUCTURE COSTS							
WBS	NAME	CONS	REPS	NET REPS	NET TOTAL COSTS	AVG PER SYSTEM	AVG PER MILE
01	HULL/FRAME	2,384,963	743,377	387,224	2,772,187	1,269	5
02	SUSPENSION/STEER	1,130,824	1,086,162	570,266	1,701,090	779	3
03	POWER PACKAGE	2,119,618	38,976,116	20,228,688	22,348,306	10,228	38
04	AUX AUTOMOTIVE	910,020	2,009,051	1,043,519	1,953,539	894	3
05	TURRET ASSEMBLY	967,921	1,703,174	892,464	1,860,385	851	3
06	FIRE CONTROL	1,246,416	10,085,589	5,287,021	6,533,437	2,990	11
07	ARMAMENT	1,137,973	644,046	337,482	1,475,455	675	3
08	BODY/CAB	0	0	0	0	0	0
09	AUTO LOADING	0	0	0	0	0	0
10	AUTO/REMOTE PILOT	0	0	0	0	0	0
11	NBC EQUIPMENT	74,288	0	0	74,288	34	0
12	SPECIAL EQUIPMENT	0	0	0	0	0	0
13	NAVIGATION	0	30,976	16,232	16,232	7	0
14	COMMUNICATIONS	279,956	351,005	187,086	467,042	214	1
15	VEH APP SOFTWARE	0	0	0	0	0	0
16	VEH SYS SOFTWARE	0	0	0	0	0	0
17	INT, ASSY, TEST, C/O	0	0	0	0	0	0
18	OTHER	1,036,251	971,174	505,375	1,541,626	706	3
	TOTAL	11,288,230	56,600,670	29,455,357	40,743,587	18,647	69

The following table displays FY 90-94 Class IX costs by Work Breakdown Structure (WBS) for the Total Army. NET TOTAL COSTS are summation for all the WBS elements displayed on the previous page and are a sum of the costs of CONS and NET REPS. AVG PER SYSTEM costs are calculated by dividing the costs in NET TOTAL COSTS by the total number of systems in the Army for the fiscal year. AVG PER MILE costs are calculated by dividing NET TOTAL COSTS by the total activity (miles) for the Total Army in the fiscal year. Blank columns indicate system was not tracked in the OSMIS database during that fiscal year.

M1 ABRAMS						
FIVE YEAR TOTAL ARMY WORK BREAKDOWN STRUCTURE COSTS						
WBS	NAME	FY 90 NET TOTAL COSTS	FY 91 NET TOTAL COSTS	FY 92 NET TOTAL COSTS	FY 93 NET TOTAL COSTS	FY 94 NET TOTAL COSTS
01	HULL/FRAME	8,964,023	16,353,100	6,274,332	3,304,926	2,772,187
02	SUSPENSION/STEER	12,164,376	26,770,519	8,905,197	4,741,242	1,701,090
03	POWER PACKAGE	232,420,443	241,274,679	65,139,367	27,756,809	22,348,306
04	AUX AUTOMOTIVE	11,571,928	12,317,346	4,316,189	3,076,312	1,953,539
05	TURRET ASSEMBLY	5,096,354	8,911,621	4,356,358	1,836,219	1,860,385
06	FIRE CONTROL	29,291,081	63,159,290	15,590,816	7,771,995	6,533,437
07	ARMAMENT	5,544,071	10,536,870	3,467,246	534,232	1,475,455
08	BODY/CAB	0	0	0	0	0
09	AUTO LOADING	0	0	0	0	0
10	AUTO/REMOTE PILOT	0	0	0	0	0
11	NBC EQUIPMENT	250,108	1,049,973	224,750	93,668	74,288
12	SPECIAL EQUIPMENT	0	0	0	0	0
13	NAVIGATION	0	0	0	0	16,232
14	COMMUNICATIONS	516,139	929,777	439,841	561,323	467,042
15	VEH APP SOFTWARE	0	0	0	0	0
16	VEH SYS SOFTWARE	0	0	0	0	0
17	INT, ASSY, TEST, C/O	0	0	0	0	0
18	OTHER	6,358,911	9,987,748	4,573,341	1,514,592	1,541,626
	TOTAL	312,177,434	391,290,923	113,287,437	51,191,318	40,743,587
	AVG PER SYSTEM	134,617	150,092	59,096	35,924	18,647
	AVG PER MILE	260	204	135	76	69

M1 ABRAMS
TOP 40 COST DRIVERS
CLASS IX CONSUMABLES (NON-DLRs)

	NSN	NOMENCLATURE	WBS	MRC	ARI	MATCAT	FY 94 AMDF UNIT PRICE	FY 94 QTY
1.	2530010696835	TRACK SHOE ASSEMBLY	02B	Z		K21JE	19.00	32,367.73
2.	1220010766745	ELECTRONIC UNIT,FIR	06F	F	D	M21JE	16,019.00	28.44
3.	2530011177942	PARTS KIT,HULL SEMI	03Q	Z		K22JE	263.00	1,497.17
4.	2530012953177	TRACK SHOE ASSEMBLY	02B	O		K21JE	188.00	1,884.43
5.	1015012128575	TUBE,CANNON	07A	Z	R	M22JE	40,712.00	8.36
6.	5855010271554	TUBE AND MAGNIFIER	06E	Z		G22SY	2,481.00	79.96
7.	5999012062487	ELECTRONIC COMPONENT	05E	F	D	M21JE	6,059.00	31.52
8.	6650013205628	PERISCOPE,ARMORED V	01A	O	D	M21JE	612.00	282.15
9.	1015010929085	TUBE,CANNON	07A	F		M21JH	14,497.00	10.54
10.	2990012765733	STARTER,ENGINE,GAS	03A	F		K21JE	822.00	162.52
11.	2540010729931	SENSOR,FIRE	01H	Z		K22JE	493.00	249.20
12.	5330010799954	SEAL,PLAIN	01A	O		K21JE	2,122.00	55.35
13.	1240013195340	PERISCOPE,ARMORED V	06E	O	D	M21JE	592.00	194.19
14.	6695013172366	TRANSDUCER,MOTIONAL	18	Z		M22JE	862.00	124.58
15.	3020010656209	SPROCKET WHEEL	03H	Z		K22JE	350.00	289.48
16.	6650013027684	PERISCOPE,TANK	01A	O		K21JE	467.00	193.90
17.	2540010729932	AMPLIFIER,CONTROL,F	01H	O		K21JE	1,232.00	73.09
18.	2940010904490	AIR CLEANER,INTAKE	03A	O		K21JE	117.00	766.56
19.	1240013195339	PERISCOPE,ARMORED V	06E	O	D	M21JE	406.00	215.91
20.	5995011413863	WIRING HARNESS,BRAN	05E	Z		M22JE	529.00	160.60
21.	4330011182869	PARTS KIT,FLUID PRE	18	Z		K22JE	52.83	1,520.29
22.	1015010908044	CHAMBER ASSEMBLY,EV	07A	O		M21JH	1,498.00	52.81
23.	4810010733188	SERVOVALVE,HYDRAULI	01A	Z		M22JE	2,305.00	32.81
24.	2590012687208	PRE-CLEANER ASSEMBL	01H	O		K21JE	1,456.00	49.49
25.	6140012101964	BATTERY,STORAGE	18	F		K21PU	57.22	1,205.55
26.	2910010833153	PUMP,FUEL,ELECTRICA	03A	H		K21JE	376.00	181.82
27.	6150010748957	CABLE ASSEMBLY,PRIN	05E	Z		M22JE	1,243.00	53.27
28.	5998011906210	CIRCUIT CARD ASSEMB	05E	Z		M22JE	1,259.00	51.75
29.	5998013575105	CIRCUIT CARD ASSEMB	05E	Z	R	M24JE	11,751.00	5.12
30.	1230012410438	SENSOR,CROSSWIND	06H	Z		M22JE	911.00	65.72
31.	1015010766742	GYRO ASSEMBLY,RATE	07A	Z		M22JE	2,132.00	27.95
32.	6135010363495	BATTERY,PRIMARY,LIT	18	Z		G22TJ	51.54	1,147.95
33.	5330010996331	SEAL,NONMETALLIC SP	01A	Z		K22JE	140.00	416.66
34.	2520011674282	FINAL DRIVE AND CON	03N	F		K21JE	6,465.00	8.69
35.	4330011177943	PARTS KIT,FLUID PRE	18	Z		K22JE	47.54	1,159.64
36.	2910013414647	PUMP,FUEL,ELECTRICA	03A	Z		K22JE	376.00	145.40
37.	2520011182873	PARTS KIT,TRANSMISS	03H	Z		K22JE	95.94	542.57
38.	6680010734217	TRANSMITTER,LIQUID	01A	Z		K22JE	477.00	108.66
39.	2530012953112	PARTS KIT,TRACK PAD	02B	Z		K22JE	25.70	1,943.65
40.	4320010734289	PUMP UNIT,ROTARY	18	Z		K22JE	874.00	56.88

NUMBER OF SYSTEMS	2,185
MILES	587,716

NOTE: ROWS MAY NOT CALCULATE DUE TO ROUNDING

M1 ABRAMS CONSUMABLES (NON-DLRs)

EXTENDED COST (QTY * UNIT PRICE)	AVERAGE COST		AVERAGE QUANTITY		FY 90-94 FIVE YEAR AVERAGE	
	PER	PER	PER	PER	QTY	EXTENDED COST
	SYSTEM	MILE	100 SYSTEMS	100 MILES		
614,987	281.46	1.05	1,481.3606	5.5074	63,534.34	1,207,152
455,580	208.50	0.78	1.3016	0.0048	63.80	1,022,012
393,756	180.21	0.67	68.5204	0.2547	2,019.57	531,147
354,273	162.14	0.60	86.2439	0.3206	4,213.34	792,108
340,352	155.77	0.58	0.3826	0.0014	12.77	519,892
198,382	90.79	0.34	3.6595	0.0136	146.95	364,583
190,980	87.41	0.32	1.4426	0.0054	57.50	348,393
172,677	79.03	0.29	12.9130	0.0480	171.64	105,044
152,798	69.93	0.26	0.4824	0.0018	68.49	992,900
133,591	61.14	0.23	7.4380	0.0277	299.25	245,984
122,856	56.23	0.21	11.4050	0.0424	415.71	204,945
117,453	53.75	0.20	2.5332	0.0094	206.37	437,917
114,960	52.61	0.20	8.8874	0.0330	116.84	69,169
107,388	49.15	0.18	5.7016	0.0212	38.26	32,980
101,319	46.37	0.17	13.2485	0.0493	1,430.91	500,819
90,552	41.44	0.15	8.8741	0.0330	180.31	84,205
90,047	41.21	0.15	3.3451	0.0124	110.11	135,656
89,688	41.05	0.15	35.0828	0.1304	3,519.79	411,815
87,659	40.12	0.15	9.8815	0.0367	113.20	45,959
84,957	38.88	0.14	7.3501	0.0273	310.60	164,307
80,317	36.76	0.14	69.5785	0.2587	2,508.58	132,528
79,110	36.21	0.13	2.4169	0.0090	46.21	69,223
75,627	34.61	0.13	1.5016	0.0056	65.74	151,531
72,057	32.98	0.12	2.2650	0.0084	96.99	141,217
68,982	31.57	0.12	55.1739	0.2051	2,366.73	135,424
68,364	31.29	0.12	8.3213	0.0309	390.95	146,997
66,214	30.30	0.11	2.4380	0.0091	36.09	44,860
65,153	29.82	0.11	2.3684	0.0088	130.63	164,463
60,165	27.54	0.10	0.2343	0.0009	1.02	11,986
59,871	27.40	0.10	3.0078	0.0112	201.38	183,457
59,589	27.27	0.10	1.2792	0.0048	95.18	202,924
59,166	27.08	0.10	52.5378	0.1953	410.57	21,161
58,332	26.70	0.10	19.0691	0.0709	892.59	124,963
56,181	25.71	0.10	0.3977	0.0015	84.00	543,060
55,130	25.23	0.09	53.0728	0.1973	1,406.49	66,865
54,670	25.02	0.09	6.6545	0.0247	47.72	17,943
52,054	23.82	0.09	24.8316	0.0923	542.50	52,047
51,831	23.72	0.09	4.9730	0.0185	128.22	61,161
49,952	22.86	0.08	88.9542	0.3307	2,609.66	67,068
49,714	22.75	0.08	2.6032	0.0097	93.68	81,876

5,256,734	46.6%	TOP 40
6,031,496	53.4%	OTHERS
=====		
11,288,230		TOTAL

M1 ABRAMS
TOP 40 COST DRIVERS
CLASS IX REPARABLES (DLRs)

	NSN	NOMENCLATURE	WBS	MRC	ARI	MATCAT	FY 94 AMDF UNIT PRICE		FY 94 QTY
							W/O CREDIT	W/CREDIT	
1.	2835011787245	ENGINE MODULE REA	03A	D	R	K21JE	180,358.00	93,605.80	67.86
2.	2835012168639	ENGINE,GAS TURBINE	03A	D	R	K21JE	487,252.00	252,883.79	19.32
3.	2835012691234	ENGINE MODULE FOR	03A	D	R	K21JE	207,650.00	107,770.35	41.33
4.	2520012108795	TRANSMISSION,HYDR	03H	D	D	K21JE	210,897.00	109,455.54	17.00
5.	1240013201255	SIGHTUNIT	06E	D	E	M21JE	58,959.00	30,894.52	46.33
6.	1240012939706	THERMAL RECEIVER V	06E	D	E	M21JE	87,191.00	45,688.08	31.18
7.	2910012937131	FUEL CONTROL,MAIN,	03A	D	R	K21JE	12,247.00	6,356.19	107.76
8.	2530012014816	WHEEL,SOLID RUBBER	02A	D	R	K21JE	349.00	181.13	2,761.66
9.	6110013440468	DISTRIBUTION BOX	04A	F	R	K21JE	19,003.00	9,862.56	50.39
10.	1240012642040	LASER RANGEFINDER	06E	D	E	M21JE	27,176.00	14,240.22	32.91
11.	2520011573745	TRANSMISSION WITH	03H	D		K21JE	210,897.00	109,455.54	3.84
12.	2990010743488	OIL PUMP ASSEMBLY,	03A	D	R	K21JE	5,533.00	2,871.63	101.48
13.	2920012618124	GENERATOR,ENGINE	03A	D	R	K21JE	6,834.00	3,546.85	70.35
14.	5975013236254	INTERCONNECTING B	05E	F	E	M21JE	17,904.00	9,381.70	24.72
15.	1240013257621	SIGHTUNIT	06E	D	E	M21JE	56,566.00	29,640.58	7.70
16.	4320011428288	PUMP,AXIAL PISTONS	18	D		K21JE	5,060.00	2,626.14	80.86
17.	2590011964716	ELECTRONIC CCONTR	04A	F	R	K21JE	8,189.00	4,250.09	44.52
18.	2920012757477	GENERATOR,ENGINE	03A	D		K21JE	6,834.00	3,546.85	48.68
19.	1240012045765	POWER CONTROL UN	06E	F	R	M21MM	21,636.00	11,337.26	15.05
20.	1240012461872	IMAGE CONTROL UNIT	06E	F	C	M21JE	17,954.00	9,407.90	17.87
21.	1240012736038	DETECTOR COOLER A	06E	D	R	M21JE	17,716.00	9,283.18	15.21
22.	1240010748947	THERMAL RECEIVER U	06E	D	E	M21JE	87,191.00	45,688.08	3.00
23.	1015010748958	SLIP RING ASSEMBLY	07A	D	R	M21JE	5,683.00	2,977.89	45.05
24.	1240012892706	SIGHTUNIT	06E	D	E	M21JE	56,566.00	29,640.58	4.00
25.	1240013201256	SIGHTUNIT	06E	D	E	M21JE	55,922.00	29,303.13	4.02
26.	2835011787246	REDUCTION GEARBO	03A	D	R	K21JE	37,748.80	19,591.63	5.98
27.	2920013058419	GENERATOR,ENGINE	03A	D		K21JE	6,834.00	3,546.85	32.05
28.	2520011216467	TRANSMISSION,CROS	03H	D		K21JE	210,897.00	109,455.54	1.00
29.	2520012029865	TRANSMISSION,WITH	03H	D	D	K21JE	210,897.00	109,455.54	0.99
30.	2920012006135	GENERATOR,ENGINE	03A	D	R	K21JE	6,834.00	3,546.85	25.05
31.	4810010766739	SERVOVALVE,HYDRA	01A	D	R	M21JE	7,382.00	3,868.17	22.44
32.	5999011714774	ELECTRONIC COMPO	05E	F	E	M21JE	7,754.00	4,063.10	21.32
33.	4320010730076	PUMP,AXIAL PISTONS	18	D	R	K21JE	5,060.00	2,626.14	32.88
34.	2510011797523	PANEL,VEHICULAR OF	01A	F	R	K21JE	4,218.00	2,189.14	37.59
35.	1015011229401	DRIVE UNIT,ELECTRO	07A	D	R	M21JE	6,169.00	3,232.56	22.13
36.	1240013249345	AZIMUTH DRIVE ASSE	06E	D	E	M21JE	13,433.00	7,038.89	10.04
37.	1290013626501	SWITCHBOARD,FIRE C	06H	F	R	M24JE	125,621.00	65,825.40	1.00
38.	2835012227936	ENGINE,MODULE FOR	03A	D	R	K21JE	207,650.00	107,770.35	0.60
39.	1240012461873	ELECTRONIC UNIT,TH	06E	F	C	M21JE	11,150.00	5,842.60	10.67
40.	4210011791059	EXTINGUISHER,FIRE,V	04B	D	R	K21JE	703.00	364.86	168.99

NUMBER OF SYSTEMS	2,185
MILES	587,716

NOTE: ROWS MAY NOT CALCULATE DUE TO ROUNDING

M1 ABRAMS REPARABLES (DLRs)

EXTENDED COST W/CREDIT (QTY * UNIT PRICE)	AVERAGE COST (W/CREDIT)		AVERAGE QUANTITY		FY 90-94 FIVE YEAR AVERAGE	
	PER SYSTEM	PER MILE	PER 100 SYSTEMS	PER 100 MILES	QTY	EXTENDED COST (W/CREDIT)
6,352,089	2,907.13	10.81	3.1057	0.0115	156.77	14,674,581
4,885,715	2,236.03	8.31	0.8842	0.0033	175.26	44,320,413
4,454,148	2,038.51	7.58	1.8915	0.0070	62.27	6,710,860
1,860,744	851.60	3.17	0.7780	0.0029	56.40	6,173,292
1,431,343	655.08	2.44	2.1204	0.0079	45.47	1,404,774
1,424,555	651.97	2.42	1.4270	0.0053	160.04	7,311,920
684,943	313.48	1.17	4.9318	0.0183	192.15	1,221,342
500,220	228.93	0.85	126.3918	0.4699	3,976.13	720,196
496,975	227.45	0.85	2.3062	0.0086	18.08	178,315
468,645	214.48	0.80	1.5062	0.0056	103.18	1,469,306
420,309	192.36	0.72	0.1757	0.0007	72.97	7,986,971
291,414	133.37	0.50	4.6444	0.0173	140.70	404,038
249,521	114.20	0.42	3.2197	0.0120	73.07	259,168
231,916	106.14	0.39	1.1314	0.0042	22.34	209,587
228,233	104.45	0.39	0.3524	0.0013	4.74	140,496
212,350	97.19	0.36	3.7007	0.0138	193.17	507,291
189,214	86.60	0.32	2.0375	0.0076	80.70	342,982
172,661	79.02	0.29	2.2279	0.0083	242.34	859,544
170,625	78.09	0.29	0.6888	0.0026	47.21	535,232
168,119	76.94	0.29	0.8178	0.0030	100.37	944,271
141,198	64.62	0.24	0.6961	0.0026	26.64	247,304
137,064	62.73	0.23	0.1373	0.0005	11.60	529,982
134,154	61.40	0.23	2.0618	0.0077	87.61	260,893
118,562	54.26	0.20	0.1831	0.0007	2.60	77,066
117,799	53.91	0.20	0.1840	0.0007	3.40	99,631
117,158	53.62	0.20	0.2737	0.0010	80.20	1,571,249
113,676	52.03	0.19	1.4668	0.0055	9.61	34,085
109,456	50.09	0.19	0.0458	0.0002	0.40	43,782
108,361	49.59	0.18	0.0453	0.0002	1.80	197,020
88,848	40.66	0.15	1.1465	0.0043	48.61	172,412
86,802	39.73	0.15	1.0270	0.0038	95.09	367,824
86,626	39.65	0.15	0.9757	0.0036	80.86	328,542
86,347	39.52	0.15	1.5048	0.0056	47.98	126,002
82,289	37.66	0.14	1.7204	0.0064	185.72	406,567
71,537	32.74	0.12	1.0128	0.0038	82.63	267,106
70,670	32.34	0.12	0.4595	0.0017	2.61	18,372
65,826	30.13	0.11	0.0458	0.0002	0.20	13,165
64,662	29.59	0.11	0.0275	0.0001	92.32	9,949,359
62,341	28.53	0.11	0.4883	0.0018	43.13	251,991
61,658	28.22	0.10	7.7341	0.0288	248.00	90,485

26,818,773	91.0%	TOP 40
2,636,584	9.0%	OTHERS
=====		
29,455,357		TOTAL

The following table summarizes FY 94 Depot Maintenance Costs from the Master File Maintenance (MFM). Depot maintenance costs are displayed by cost elements for end item maintenance and secondary item maintenance. The OTHER cost columns represent work categories such as progressive maintenance, renovation, and fabrication/manufacture. For reporting purposes, TRANSPORTATION costs recorded in the World Aircraft Logistics Conference (WALC)/Special Aircraft Assignment Mission (SAAM) records are shown in the OTHER maintenance category.

M1 ABRAMS FY 94 DEPOT MAINTENANCE COSTS							
COST ELEMENTS	END ITEM MAINTENANCE				SECONDARY ITEM MAINTENANCE		
	REPAIR	OVERHAUL	OTHER	MODIFICATION	REPAIR	OVERHAUL	OTHER
CIVILIAN LABOR	9,508,855	4,578	1,861,581	0	70,127	368,988	54,140
MILITARY LABOR	0	0	0	0	0	0	0
MATERIEL	18,391,387	191,090	4,447,616	0	73,972	1,831,991	559,111
TRANSPORTATION	0	0	0	0			
OVERHEAD	12,100,585	6,947	2,606,527	0	85,657	544,162	72,387
CONTRACT	0	0	0	0	0	0	0
OTHER	246,058	2,947	54,649	0	298	4,418	311
TOTAL	40,246,885	205,562	8,970,373	0	230,054	2,749,559	685,949
QTY COMPLETED	237	0	388	0	303	1,229	260
AVG COST	169,818	0	23,120	0	759	2,237	2,638

The table below summarizes FY 94 Intermediate Maintenance Costs from the Work Order Logistics File (WOLF) data. The labor hours and labor costs for Direct Support/General Support Intermediate Maintenance (DS/GS) and Civilian Maintenance are displayed by MACOM and Total Army. MACOM DS/GS LABOR COSTS are calculated by multiplying MACOM labor hours by the Army Manpower Cost System (AMCOS) E-5 composite standard rate (\$16.61). CIVILIAN LABOR COSTS are a summation from the source data.

M1 ABRAMS FY 94 INTERMEDIATE MAINTENANCE COSTS					
MACOM	DS/GS LABOR HOURS	DS/GS LABOR COSTS	CIVILIAN LABOR HOURS*	CIVILIAN LABOR COSTS*	CIVILIAN LABOR COST/HOUR
FORSCOM	274	4,551	0	0	0.00
USAREUR	0	0			
EUSA	746	12,391			
USARPAC	0	0			
USARSO	0	0			
USASOC	0	0			
TRADOC	170	2,824	0	0	0.00
ARNG	39,272	652,308			
USAR	0	0			
TOTAL ARMY	40,462	672,074	0	0	0.00

*TRADOC LABOR HOURS and LABOR COSTS include contractor hours and costs.

The following table summarizes FY 90-94 Depot Maintenance Costs. The depot maintenance data are recorded in MFM. FY 94 costs are a summation of the cost elements displayed on the previous page. END ITEM OVERHEAD costs were not separately identified prior to FY 92. TRANSPORTATION costs are recorded in the WALC/SAAM records. Blank columns indicate system was not tracked in the OSMIS database during that fiscal year.

M1 ABRAMS FIVE YEAR DEPOT MAINTENANCE COSTS										
COST ELEMENTS	END ITEM MAINTENANCE					SECONDARY ITEM MAINTENANCE				
	FY 90	FY 91	FY 92	FY 93	FY 94	FY 90	FY 91	FY 92	FY 93	FY 94
CIVILIAN LABOR	4,752,737	3,240,266	7,675,334	8,018,240	11,375,014	5,656,747	7,982,207	4,833,906	2,419,134	493,255
MILITARY LABOR	0	0	0	0	0	0	0	0	0	0
MATERIEL	8,830,926	24,012,550	22,696,583	21,726,007	23,030,093	11,250,119	35,955,180	22,488,836	6,442,041	2,465,074
TRANSPORTATION	0	0	0	0	0					
OVERHEAD	0	0	10,035,146	10,367,777	14,714,059	7,767,060	10,791,818	6,724,072	4,405,471	702,206
CONTRACT	0	0	0	0	0	0	0	0	0	0
OTHER	7,614,032	3,888,580	816,496	468,971	303,654	1,170,198	616,033	442,243	32,175	5,027
TOTAL	21,197,695	31,141,396	41,223,559	40,580,995	49,422,820	25,844,124	55,345,238	34,489,057	13,298,821	3,665,562
QTY COMPLETED	1,156	77	227	266	625	5,025	11,399	9,778	5,413	1,792
AVG COST	18,337	404,434	181,602	152,560	79,077	5,143	4,855	3,527	2,457	2,046

The table below summarizes FY 90-94 Intermediate Maintenance Costs from WOLF. The fiscal year total costs for Direct/General Support Intermediate Maintenance (DS/GS) and Civilian Maintenance are displayed by MACOM and Total Army. MACOM DS/GS labor costs are calculated by multiplying MACOM labor hours by the Army Manpower Cost System (AMCOS) E-5 composite standard rate. DS/GS COST PER HR is the E-5 composite standard rate in FY 94 constant dollars. CIVILIAN LABOR COSTS are a summation from the source data. Blank columns indicate system was not tracked in the OSMIS database during that fiscal year.

M1 ABRAMS FIVE YEAR INTERMEDIATE MAINTENANCE COSTS										
MACOM	DIRECT/GENERAL SUPPORT INTERMEDIATE MAINTENANCE (DS/GS)					CIVILIAN MAINTENANCE (CIV)				
	FY 90	FY 91	FY 92	FY 93	FY 94	FY 90	FY 91	FY 92	FY 93	FY 94
FORSCOM	660,558	218,589	153,302	32,892	4,551	29,953	23,302	1,169	19,604	0
USAREUR	0	0	0	0	0					
EUSA	26,623	42,796	38,157	53,100	12,391					
USARPAC	0	0	0	0	0					
USARSO	0	0	0	0	0					
USASOC	0	0	0	0	0					
TRADOC	10,905	36	2,908	2,315	2,824	179,843	638,414	373,208	492,666	0
ARNG	279,666	330,415	583,856	439,616	652,308					
USAR	0	0	0	0	0					
TOTAL ARMY	977,752	591,836	778,223	527,923	672,074	209,796	661,716	374,377	512,270	0
LABOR HRS	58,202	34,891	46,212	30,717	40,462	11,375	34,139	19,613	25,763	0
COST PER HR	16.80	16.96	16.84	17.19	16.61	18.44	19.38	19.09	19.88	0.00

The following list shows the FY 94 Secondary Item - Rebuilds/Overhauls Cost Drivers recorded in the MFM. AVG COST TO REBUILD/OVERHAUL is calculated by dividing the costs in FY 94 TOTAL COST TO REBUILD/OVERHAUL by FY 94 QTY COMPLETED.

M1 ABRAMS FY 94 DEPOT SECONDARY ITEM MAINTENANCE - REBUILDS/OVERHAULS COST DRIVERS					
NSN	NOMENCLATURE	FY 94 AMDF PRICE	FY 94 TOTAL COST TO REBUILD/ OVERHAUL	FY 94 QTY COMPLETED	AVG COST TO REBUILD/ OVERHAUL
2835-01-178-7245	ENGINE MODULE RE	180,358	1,100,666	23	47,855
2835-01-269-1234	ENGINE MODULE FO	207,650	652,827	18	36,268
2530-01-201-4816	WHEEL,SOLID RUBB	349	115,797	823	141
2910-01-279-7911	FUEL CONTROL,MAI	8,454	67,851	35	1,939
4820-01-308-1858	VALVE,LINEAR,DIR	3,057	57,792	31	1,864
1240-01-289-2707	SIGHTUNIT	55,922	44,325	3	14,775
4810-01-076-6739	SERVOVALVE,HYDRA	7,382	42,669	25	1,707
1240-01-289-2706	SIGHTUNIT	56,566	41,422	4	10,356
1015-01-187-1045	SLIP RING ASSEMB	4,775	34,116	14	2,437
2990-01-074-3488	OIL PUMP ASSEMBL	5,533	31,773	34	935

The following list shows the FY 94 Secondary Item Maintenance - Repairs Cost Drivers recorded in MFM. AVG COST TO REPAIR is calculated by dividing the costs in FY 94 TOTAL COST TO REPAIR by FY 94 QTY COMPLETED.

M1 ABRAMS FY 94 DEPOT SECONDARY ITEM MAINTENANCE - REPAIRS COST DRIVERS					
NSN	NOMENCLATURE	FY 94 AMDF PRICE	FY 94 TOTAL COST TO REPAIR	FY 94 QTY COMPLETED	AVG COST TO REPAIR
5975-01-251-8646	BOX ASSEMBLY,TUR	20,017	40,875	13	3,144
5975-01-076-6688	INTERCONNECTING	17,904	30,026	8	3,753
1220-01-290-7508	COMPUTER,FIRE CO	17,482	30,026	13	2,310
1240-01-276-6628	COLLIMATOR,INFIN	1,028	22,623	27	838
1240-01-275-0077	COLLIMATOR,INFIN	1,800	15,639	18	869
5999-01-190-6175	ELECTRONIC COMPO	7,015	13,609	9	1,512
2510-01-179-7523	PANEL,VEHICULAR	4,218	11,763	8	1,470
6110-01-255-3354	DISTRIBUTION BOX	8,725	11,120	5	2,224
1290-01-076-6740	GRIP ASSEMBLY,CO	1,890	8,513	9	946
1090-01-076-6865	GRIP ASSEMBLY,CO	2,136	8,256	19	435

The following list shows the FY 90-94 Secondary Item - Rebuild/Overhauls Cost Drivers recorded in MFM. These five year Cost Drivers were revised from previous years' report, see Appendix A, Section 15 for further explanation. AVG COST TO REBUILD/OVERHAUL is calculated by dividing the costs in FY 90-94 TOTAL COST TO REBUILD/OVERHAUL by FY 90-94 QTY COMPLETED.

M1 ABRAMS FIVE YEAR DEPOT SECONDARY ITEM MAINTENANCE - REBUILDS/OVERHAULS COST DRIVERS					
NSN	NOMENCLATURE	FY 94 AMDF PRICE	FY 90-94 TOTAL COST TO REBUILD/ OVERHAUL	FY 90-94 QTY COMPLETED	AVG COST TO REBUILD/ OVERHAUL
2835-01-216-8639	ENGINE,GAS TURBI	487,252	35,753,543	491	72,818
2835-01-178-7245	ENGINE MODULE RE	180,358	17,985,795	454	39,616
2835-01-222-7936	ENGINE,MODULE FO	207,650	9,815,167	362	27,114
2520-01-157-3745	TRANSMISSION WIT	210,897	7,129,938	213	33,474
2520-01-210-8795	TRANSMISSION,HYD	210,897	5,765,315	144	40,037
1240-01-132-1693	SIGHTUNIT	58,959	3,968,030	301	13,183
1240-01-289-2706	SIGHTUNIT	56,566	3,285,922	150	21,906
1240-01-289-2707	SIGHTUNIT	55,922	1,749,062	147	11,898
2835-01-178-7246	REDUCTION GEARBO	37,749	1,593,744	286	5,573
2910-01-293-7131	FUEL CONTROL,MAI	12,247	1,332,859	601	2,218

The following list shows the FY 90-94 Secondary Item - Repairs Cost Drivers recorded in MFM. These five year Cost Drivers were revised from previous years' report, see Appendix A, Section 15 for further explanation. AVG COST TO REPAIR is calculated by dividing the costs in FY 90-94 TOTAL COST TO REPAIR by FY 90-94 QTY COMPLETED.

M1 ABRAMS FIVE YEAR DEPOT SECONDARY ITEM MAINTENANCE - REPAIRS COST DRIVERS					
NSN	NOMENCLATURE	FY 94 AMDF PRICE	FY 90-94 TOTAL COST TO REPAIR	FY 90-94 QTY COMPLETED	AVG COST TO REPAIR
2835-01-120-3674	ENGINE AND CONTA	487,252	26,682,952	302	88,354
2835-01-120-3675	MODULE AND CONTA	207,650	5,326,188	180	29,590
2835-01-120-3676	MODULE AND CONTA	180,358	3,409,590	47	72,544
2835-01-273-8822	POWER PACK WITH	767,918	1,698,776	3	566,259
2920-01-200-6135	GENERATOR,ENGINE	6,834	734,103	388	1,892
2835-01-197-8325	GEARBOX,ACCESSOR	17,073	732,460	152	4,819
1240-01-246-1872	IMAGE CONTROL UN	17,954	373,729	95	3,934
1240-01-190-3318	SIGHTUNIT	56,566	260,860	1	260,860
1015-01-076-6741	ELEVATING MECHAN	1,209	257,914	150	1,719
6110-01-083-5606	DISTRIBUTION BOX	19,003	221,791	109	2,035

CHOOSE A VOLUME FOR MORE SYSTEMS



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